

TOP SECRET

25X1

PRIORITY

OUT53575

Mut

P 110120Z
FM NPIC

1964 JUN 11 02 20Z

11 JUN 1964

AFSSO USAFE
AFSSO PACAF

AFS 25X1

CJS 25X1

CFC

PNS

ACL

Declassification Review by NGA/DoD

OPCEN
YWQLAZC/AFSSO SAC
YWQLAZC/AFSSO ACIC
YWQLAZC/AFSSO FTD
ZEM
TOP SECRET

25X1
Grace (File)

SSOS PASS TO APPROPRIATE TCOS. CITE

25X1

NPIC 2414.

SUBJECT: CAMERA INFORMATION FOR MISSION 1006-1.

A. THIS PHOTOGRAPHY INVOLVES THE USE OF EIGHT CAMERAS: TWO MAIN CAMERAS, FOUR HORIZON CAMERAS, A STELLAR CAMERA AND AN INDEX CAMERA.

B. OPERATIONAL FOCAL LENGTHS

	FWD UNIT (MM)	AFT UNIT (MM)
(1) MAIN LENS	609.602	609.602
(2) PORT HORIZON LENS	54.83	54.24
(3) STARBOARD HORIZON LENS	54.75	55.12
(4) STELLAR CAMERA	84.054	
(5) INDEX CAMERA	37.97	

C. LENS DISTORTION (PIN CUSHION)

(1) MAIN LENS

FWD UNIT

AFT UNIT

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GROUP 1
Excluded from automatic
downgrading and
declassification

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(DEGREES)	(MM)	(MM)
3	.004	.004
2	.003	.003
1	.001	.001
0	.000	.000
359	.001	.001
358	.004	.002
357	.009	.005

(2) HORIZON CAMERAS	FWD		AFT	
	PORT	STARBOARD	PORT	STARBOARD
(RADIAL) 10 DEGREES	.001 MM	.000 MM	.004 MM	.004 MM
20 DEGREES	.004 MM	.007 MM	.006 MM	.009 MM
(TANGENTIAL) MAX. VECTOR	.004 MM	.002 MM	.001 MM	.001 MM

D. DEPRESSION ANGLES OF HORIZON CAMERAS RELATIVE TO NOMINAL MAIN CAMERA.

	PORT	STARBOARD
FWD	14 DEGREES 58' 49"	N/A DEGREES
AFT	14 DEGREES 53' 51"	15 DEGREES 38' 18"

E. CAMERA FILTER AND EXPOSURE DATA

	MAIN	HORIZON	STELLAR	INDEX
FILTER	WRATTEN 21	WRATTEN 25	NONE	WRATTEN 21
APERTURE	F 3.5	STARBOARD F 8.0	F 1.8	F 4.5
		PORT F 6.8		

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SLIT WIDTH/

EXPOSURE	0.20 INCH	1/100 SEC	2 SEC	1/500 SEC
FILM	SO 132	SO 132	SO 102	SO 130

F. RESOLUTION CAPABILITIES

(1)	(L/MM AVG)	MAIN	PORT HORIZON	STARBOARD HORIZON
	FWD	181	101	120
	AFT	180.5	89	99

(2) INDEX (L/MM AWAR) 72

G. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

H. CALIBRATED ANGLES OF CAMERAS

(1) CALIBRATED CONVERGENT ANGLE OF MAIN CAMERAS 30 DEGREES 1.14 MINUTES.

(2) CALIBRATED ANGLE BETWEEN STELLAR AND INDEX CAMERAS 89 DEGREES 43.5 MINUTES.

(3) STELLAR (LOC. OF P.P.) NOT AVAILABLE

(4) INDEX (LOC. OF P.P.) NOT AVAILABLE

I. IMAGE MOTION COMPENSTATION DATA

A. FMC PROGRAMMER REFERENCE LEVEL

(1) GROUND ANGULAR VELOCITY 0.0296 (RAD/SEC)

PASSES: 1D, 2D, 3D, 5D

(2) GROUND ANGULAR VELOCITY 0.0329 (RAD/SEC)

PASSES: 6D1, 6D2, 6D3

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(3) GROUND ANGULAR VELOCITY 0.0297 (RAD/SEC)

PASSES: 7D THROUGH AND INCLUDING 56D

B. FMC PROGRAMMER AMPLITUDE LEVEL

(1) GROUND ANGULAR VELOCITY 0.0111 (RAD/SEC)

PASSES: 1D, 2D, 3D, 5D

(2) GROUND ANGULAR VELOCITY 0.0103 (RAD/SEC)

PASSES: 6D1, 6D2, 6D3

(3) GROUND ANGULAR VELOCITY 0.0146 (RAD/SEC)

PASSES: 7D THROUGH AND INCLUDING 56 D

J. PROGRAM TIME DATA

PASS	CAMERA ON TIME				PROGRAM ON TIME	PROGRAM
	(ZEBRA TIME)				UP RAMP	DURATION
	DAY	HR	MIN	SEC	(SEC)	(SEC)
1D1	05	00	29	18	1987	39
2D1	05	01	56	24	1764	86
3D1	05	03	28	43	1860	100
5D1	05	06	32	13	1991	233
6D1	05	08	00	59	2128	84
6D2	05	08	04	45	2355	148
6D3	05	08	07	52	2541	74
7D1	05	09	32	06	2185	428
9AE	05	12	12	56	967	45
9D1	05	12	33	35	2207	143

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15D1	05	21	39	48	2412	113
18D1	06	02	05	20	2056	118
19D1	06	03	34	13	1940	110
19D2	06	03	39	25	2252	84
21D1	06	06	41	25	2291	75
21D2	06	06	43	18	2404	356
22D1	06	08	10	18	2185	84
22D2	06	08	14	19	2426	89
22D3	06	08	16	27	2554	118
23D1	06	09	43	10	2354	232
24D1	06	11	07	54	2010	256
24D2	06	11	12	48	2304	151
25AE	06	12	22	09	1035	46
25D1	06	12	41	59	2225	281
31D1	06	21	47	08	2385	85
35D1	07	03	46	03	2200	87
36D1	07	05	18	53	2343	205
37D1	07	06	48	55	2317	100
37D2	07	06	51	56	2498	350
38D1	07	08	18	27	2263	101
38D2	07	08	20	59	2415	335
40AE	07	10	59	41	1096	46
40D1	07	11	19	12	2268	100

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49D1	08	01	02	56	2987	44
49D2	08	01	12	10	3541	83
52D1	08	05	26	29	2405	220
53D1	08	06	55	40	2333	161
53D2	08	06	59	26	2559	306
54D1	08	08	29	24	2535	306
55D1	08	09	56	05	2312	267
56AE	08	11	07	18	1161	46
56D1	08	11	26	16	2299	161

NOTE 1. DATA IS THE SAME FOR BOTH THE MASTER AND SLAVE UNITS.

K. TIME CORRELATION (MILLISECONDS)

PASS	SYSTEM TIME	CLOCK TIME	DIFFERENCE
09	43933.015	356859.525	
25	44487.140	443813.564	MINUS 0.086
31	78697.275	478023.709	PLUS 0.010
40	39358.555	525264.982	MINUS 0.007
47	79180.918	28036.462	PLUS 0.028
56	39997.471	75252.967	MINUS 0.048
63	79595.975	114851.473	PLUS 0.002

L. REMARKS: FOLLOWING MISSING ITEMS WILL BE FURNISHED WHEN AVAILABLE:

PARA D - DEPRESSION ANGLE OF FWD STARBOARD HORIZON
CAMERA

PARA H - ITEMS 3 AND 4 STELLAR AND INDEX (LOC. OF P.P.)

S/I DATA FOR MISSION 1006-2

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/END OF MESSAGE/

25X1

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